

Preliminary Draft

**Habilitation/Rehabilitation
Services
Chapter**

**District of Columbia
State Health Systems Plan**

**State Health Planning and
Development Agency
District of Columbia
Department of Health**

HABILITATION/REHABILITATION SERVICES

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
I. INTRODUCTION.....	1
II. BACKGROUND AND TRENDS.....	2
III. SUMMARY RESOURCE INVENTORY AND HISTORICAL UTILIZATION OF SERVICES.....	8
IV. PROJECTIONS.....	12
V. CRITERIA AND STANDARDS.....	15
VI. GOALS AND OBJECTIVES.....	19
VII. APPENDICES.....	21
VIII. REFERENCES.....	28

HABILITATION/REHABILITATION SERVICES

I. INTRODUCTION

Habilitation and rehabilitation services refer to a wide range of treatment modalities, facilities, and settings that focus on an equally wide range of physical, mental, and developmental disabilities. The Commission for the Accreditation of Rehabilitation Facilities (CARF) offers a broad definition of “rehabilitation”. This definition includes a wide range of patient populations and delivery systems that encompass services to persons with lifelong disabilities as well as short-term needs. It includes individuals with severe mental illness, developmental disabilities, and long-term chronic conditions, in addition to persons whose short and long-term chronic conditions and disabilities are related to trauma, physical illness, or other illnesses for which substantial enhancement in activities of daily living can be expected. Rehabilitative services can be broadly placed in three categories. The categories are chronic care, over thirty days of care; acute care, less than thirty days of care; and sub-acute care, maintenance care.

CARF’s definition of habilitation services is the process of providing services to individual who need to acquire particular skills and/or functional abilities not possessed previously. Habilitation is closely related to and is a part both conceptually and programmatically of rehabilitation. The range of functional goals is the same as is the range of services, which should be provided to maintain the goals. The major difference between rehabilitation and habilitation is the condition or nature of who is served.

To address the breadth of populations and needs, CARF has established five divisions under which services are accredited: (1) behavioral health, (2) medical rehabilitation, (3) employment and community services, (4) adult day services, and (5) assisted living.

Medical habilitative/rehabilitation services are coordinated and integrated within the continuum and linked to other service systems, including acute care, nursing facilities, and transportation services. These services include evaluation and treatment of patients, and they emphasize educating and training them as well. The services also include medical/ nursing care, physical therapy, speech therapy, occupational therapy, counseling/psychological services, and nutrition. In addition, assistive devices and technological innovations are also provided.

Many consumers experience severe disabling impairments of recent onset or recent progression; however there are special need populations, i.e. the pediatric population that have experienced injuries from the birthing process.

This target population may experience multiple treatment episodes related to the same condition, or they may not have had prior exposure to habilitation and/or rehabilitation services. The treatment modality requires that the various target populations improve in their activities of daily living (ADLs) in an observable way within a reasonable time. The potential for such change is viewed as essential. The maintenance of an enhanced functional level is a necessary part of the habilitation/rehabilitation process.

II. BACKGROUND AND TRENDS

A. Background

Physiatry, or physical medicine, has not always been recognized as a medical specialty comparable in status with some of the acute care medical specialties. One reason is because the physiatrist is viewed as a coordinator of specialized therapies who must depend on numerous non-physician specialists (occupational, physical and speech therapists, etc.) to provide the “hands-on” care to patients, rather than directly provide that care him or herself. The role of the physiatrist has expanded in recent years due to a growing recognition of the need for physicians and other health practitioners who are specifically trained in the physiology of chronic illness and in the physical and behavioral adaptation of the disabled. Increasing numbers of patients with chronic diseases, traumatic injuries, and birth defects have created increased demand for the services of the physiatrist. The physiatrist and other health care practitioners apply ongoing techniques in the evaluation and treatment of neuromuscular, musculoskeletal and cognitive systems with the goal of helping persons with acute and chronic disabilities reach and/or maintain maximum potential.

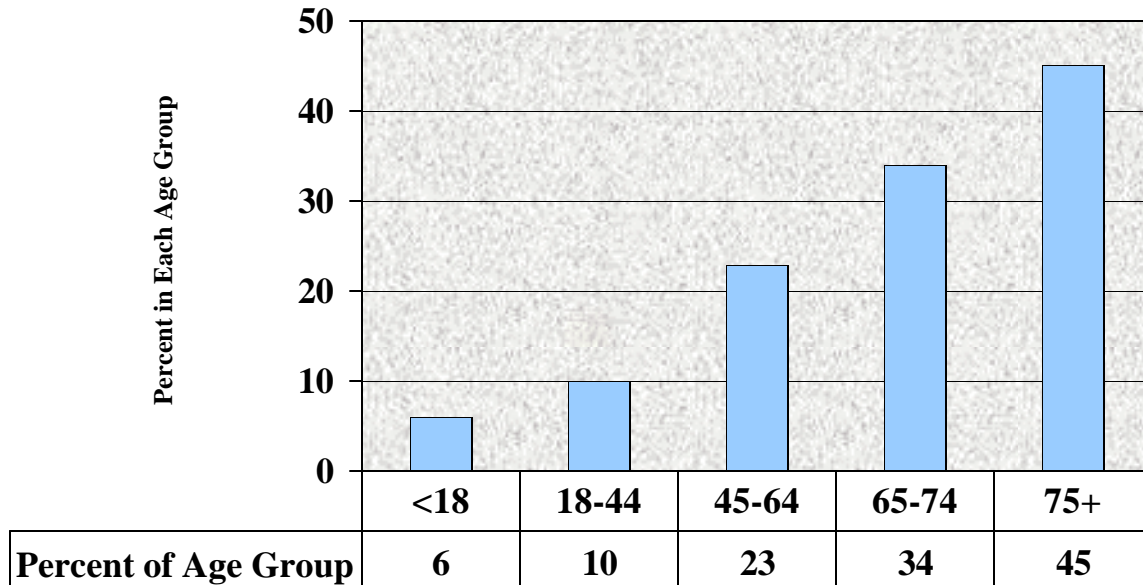
B. Target Populations in Need of Habilitation/Rehabilitation Services

1. Individuals with Chronic Conditions

In addition to long-term medical care, people with chronic conditions often need personal, social, or rehabilitative care over a prolonged period of time. Chronic conditions are more prevalent and more complex among people with lower incomes, for example, those on Medicaid. Of approximately 40 million Medicaid beneficiaries, 10 to 12 million have chronic conditions or illnesses.

Figure 1 shows the percentage of individuals, listed by age, who have chronic conditions that limit their physical activities. Current utilization patterns in rehabilitation facilities suggest that chronic diseases represent a significant number of the persons requiring rehabilitation services. Chronic disease-related conditions that require admissions to a facility include stroke, kidney failure, heart failure, arthritis, bone fractures related to osteoporosis, and chronic pain, e.g., back pain.

Figure 1. Percent of Individuals in Each Age Group Limited in Activities Because of Chronic Conditions



Source: Trupin, Laura and Dorothy Rice, Health Status, Medical Care Use, and Number of Disabling Conditions in the United States, Disability Statistics Abstract Number 9 (June 1995) National Institute on Disability and Rehabilitation Research.

As the average age of Americans increases, the need for rehabilitation programs will also increase because there is a greater prevalence of conditions that require rehabilitation services among older persons. Today, the aging population has a higher expectation of sustaining physical and behavioral activities, as is evidenced by a large proportion of the “baby boomers” continuing athletic and physical exercise, and by the promotion of good health and exercise among all age groups. There appears to be a belief among physically active middle-age individuals that medicine, health and wellness services and technology will enable them to continue many of their activities until their late 80s.

2. Traumatic Injuries

Traumatic injuries such as spinal cord injury, brain injury, and burns represent the second major category of persons requiring rehabilitation, and are caused by motor vehicle accidents, industrial accidents, fires, and interpersonal violence. These injuries are some of the more serious, and these patients often require more intensive services. The extent to which the number of persons receiving rehabilitation services for traumatic injuries will increase largely depends upon several factors, including the utilization of preventive measures (e.g., air bags or automatic seat belts in cars), the progress made in developing medical technologies and trauma care systems that might mitigate the long-term effects of traumatic injuries, and the extent to which the affected population has access to rehabilitation services.

3. *Individuals Suffering Birth Injuries and Congenital Defects*

The third major category of patients utilizing habilitation/rehabilitation services includes persons suffering from birth injuries and congenital defects. Children who require these services during the early stages of life may also need special education and vocational services, as they grow older. These services distinguish pediatric rehabilitation from adult rehabilitation. The younger patient generally experiences more intervention due to a better prognosis and, as a result, the duration of the treatment program is usually longer. Also, it is important throughout the habilitative/rehabilitative process that the provider, child and family maintain a close working relationship.

Among the pediatric conditions where rehabilitation is involved are Cerebral Palsy, Spina Bifida, Birth Brachial Plexus Palsy, and Torticollis. Physiatrists manage children with traumatic brain injury, congenital and acquired amputations, and both acute and long-term spinal cord injury. They also manage children with muscle diseases such as Duchenne muscular dystrophy and spinal muscular atrophy, pediatric burns, and a myriad of congenital disabilities.

4. *Workplace Injuries*

Another consideration for rehabilitation services is workplace injuries. A total of 5.7 million injuries and illnesses were reported in private industry workplaces during 1999, resulting in a rate of 6.3 cases per 100 equivalent full-time workers, according to a survey by the Bureau of Labor Statistics, U.S. Department of Labor. Of the 5.7 million nonfatal occupational injuries and illnesses reported in 1999, as much as 5.3 million were solely injuries. Lost workday cases are comprised of two types: those requiring at least one day away from work, with or without restricted work activity, and those requiring restricted activity only. The latter type may involve shortened hours, a temporary job change, or temporary restrictions on certain duties (for example, no heavy lifting) of a worker's regular job. Often these cases require one or more habilitative/rehabilitation services, physical therapy, occupational therapy, and/or vocational rehabilitation. These types of injuries are accompanied by financial cost factors to employers through increased reimbursement rates through worker's compensation benefits and/or third party reimbursement provisions.

C. Types of Services

Children and adults with disabilities require a multitude of services, including inpatient care, outpatient visits, prescribed drugs, diagnostic services, durable medical equipment, transportation, home health, and short/long-term care. Comprehensive medical rehabilitation services are physician-directed services that include but are not limited to the disciplines of physical therapy, occupational therapy, respiratory therapy, recreational therapy, vocational counseling, psychological counseling, social services, vision, speech/language, and hearing services.

Prior to the implementation of a habilitation/rehabilitation program, screening is performed to determine whether a patient is a suitable candidate for inpatient or outpatient services, and to identify the services that will be needed. This screening process considers the underlying disease

or injury, the scope of the functional deficit, and the expected outcomes of proposed services. Rehabilitation services are provided in an interdisciplinary fashion with the goal of maximizing the individual's potential. For example, patients with extensive burn injuries, spinal cord injuries, or traumatic brain injuries receive services in a rehabilitation hospital; whereas, patients with multiple fractures may receive services in an acute health care facilities, acute rehabilitation or skilled nursing facility, or in a sub-acute care unit. In addition, patients may receive services in free-standing habilitation/rehabilitation centers. Fractures in the elderly require acute rehabilitation services supplemented by appropriate comprehensive geriatric support services, i.e. case management, transportation and referrals.

Patients who have failed to progress on an appropriately designed and implemented outpatient program and who have a reasonable prognosis for improvement with a more intensive inpatient program are also candidates for inpatient medical rehabilitation.

D. Major Issues in Medical Habilitation/Rehabilitation Services

There has been a shift towards community-based habilitation/rehabilitation services in the District of Columbia inclusive of outpatient, home-based treatment and community-based services. Most of the continuum of care is now provided outside of any inpatient setting. Major issues in the medical habilitation/rehabilitation arena lend further evidence that shifts toward non-inpatient services are increasingly responding to consumer demands, technological advances, and financial and reimbursement incentives. However, District Medicaid does not currently pay for rehabilitation therapy in the long-term care setting, thus sub-acute care is not a Medicaid reimbursable service.

1. Geographic Access

The location of habilitation/rehabilitation services must be convenient to consumers in order to support program compliance, reduce costs, and promote as much independence within the community as possible. Geographical location will continue to be an important factor in a system of capacity building and determining the need for such services from an economic, financial, marketing, regulatory, policy development perspective.

Similarly, access to various forms of transportation systems, both public and private to patients will become increasingly important as more and more patients can be expected to use public transportation to make regular rehabilitation visits.

2. Integration of Services Across Providers

Within the next five years, the District's focus will be the establishment of an integrated service delivery system that incorporates inter and intra-agency agreements to achieve a high level of effective and efficient performance outcomes in habilitation and rehabilitation services.

It is increasingly important that the public and private organizations provide seamless services. Such relationships make it possible to align services most precisely with consumer's needs. With the establishment of such networks there is an accelerated, positive shift toward

community-oriented services, thereby increasing demand for less intensive treatment. Other benefits include greater continuity, improved quality of services and effective case management.

3. *Assistive Technology Devices*

Technological advances in biomedical and habilitation/rehabilitation engineering have resulted in the innovative clinical application of new technology to rehabilitative medicine and have a positive impact on the objectives and outcomes of the rehabilitation process. The potential for the disabled individual to function independently has been enhanced by developments such as the additional uses for biofeedback devices, therapeutic pharmaceutical interventions, improved wheelchair design and construction, increased awareness of metallurgy and its usefulness in the design of prosthetic devices, and the computerization and computerized interface devices that assist individuals who have short-term and long-term behavioral and physical disabilities in to perform a variety of tasks.

The implications of new medical technology and therapeutic pharmaceutical interventions may present the following:

- Additional demand for shifts to community and home-based treatment modalities;
- Opportunity to impact the reimbursement mechanisms to cover the cost;
- Increased focus on health education, and telehealth communication regarding the availability and the use of these devices, and
- Requirements for credentialing and accreditation training of physicians, providers, program professionals and technicians to keep abreast of developments and to customize products for customer use.

4. *Financing Issues*

a. Changes in Medicare and Medicaid payment

In 2002, the Centers for Medicare and Medicaid (CMS) instituted Medicare Part A as primary payer and Prospective Payment System (PPS) with appropriate incentives for community-based and inpatient habilitation/rehabilitation services. The method, known as the “prospective payment system” (PPS), establishes a fixed-fee schedule for each category of habilitation/rehabilitation services based on the target population’s needs and the respective individual treatment plan. The goal of this system is to provide financial incentives to health service providers to reduce costs and to provide quality care and related ancillary services.

Also, of specific interest to rehabilitation facilities is a change in the Medicare benefit itself. Medicare has broadened the homebound definition under the home health benefit. The new benefit enables a Medicare-eligible individual to receive health care treatment, including regular absences for the purpose of participating in therapeutic, psychosocial, or medical treatment in an adult day care program that is licensed or certified by a state or accredited, to furnish adult day care services in the state. This benefit will expand the access of day programs to individuals who previously were prohibited from accessing such services. By increasing the prospect of more consumers utilizing home and community-based services simultaneously, the intensity of medical rehabilitation will further shift from inpatient to community settings.

b. Limits on reimbursement and effects of managed care

A majority of the health insurers, including Medicare, Medicaid, managed care organizations, and other commercial health payers, provide covered health benefits for individuals with disabilities. The health coverage for injuries, illnesses, and/or disabilities; types of services; length of time for services; and payment limitations are defined by respectively in the benefit packaged offered by the health insurer, whether it is Medicare, Medicaid, Tricare for Life, managed care, or commercial health plans.

The issues related to reimbursement include onset of illness, disability and/or injury, and requirements related to medical necessity criteria for type, length of service, and location of services. Commercial health insurance as well as managed care health plans may limit health coverage for acute injuries and illnesses, unless the individual's condition meets the requirements related to medically necessary services, including catastrophic injuries. Prior to the patient meeting Medicare or Medicaid eligibility requirements, the overall cost of care can have a profound financial impact.

c. Pharmaceutical coverage

Once individuals with disabilities meet eligibility requirements, they are eligible for covered services through Medicare and Medicaid and other reimbursement options; however, pharmaceuticals are not a covered health benefit under the Medicare program for inpatient services. The National Rehabilitation Hospital Center for Health and Disability Research reports that the "typical" individual with a disability uses nine times more prescription drugs than his or her counterpart without disabilities. The overall cost can be as high as 30 times what a person without a disability will pay, with many of these costs coming out-of-pocket.

d. Long-term care insurance

Recent decreases in the costs for long-term care insurance have provided an opportunity for people to purchase covered services that could pay for home, nursing home, and/or assisted living expenses should an individual become disabled. Costs for the insurance vary by age, type of program selected, and the number and type of services to be covered.

There are mixed reviews as to the benefit of prepaying for long-term care. Some financial analysts believe that individuals would fare as well if they saved the same amount of money in a personal or medical savings account and would then have ready access to the funds; whereas, money paid into long-term care insurance is similar to a term insurance policy. Monthly costs for long-term care insurance may be as low as \$125 per month; however, when combined with other health insurance premiums, it may be more than the average individual can afford.

III. SUMMARY RESOURCE INVENTORY AND HISTORICAL UTILIZATION OF SERVICES

This section focuses on medical rehabilitation services as defined by CARF. While CARF does not publish a specific definition of medical programs, it does issue a list of the types of programs that are accredited under its Medical Rehabilitation Manual. They are:

- Comprehensive Integrated Inpatient Rehabilitation programs
- Spinal Cord Systems of Care
- Interdisciplinary Pain Rehabilitation programs
- Brain Injury programs
- Outpatient Medical Rehabilitation programs
- Home- and Community-Based Rehabilitation

- Health Enhancement programs
- Pediatric Family-Centered Rehabilitation
- Occupational Rehabilitation programs
- Medical Rehabilitation Case Management

These are categories for accreditation of facilities and services. Licensure requirements are set forth in the District of Columbia Municipal Regulations 22, Chapter 40, 4099.2. The definition is general and follows the overall CARF definition in the first paragraph of this chapter.

A. Acute Inpatient Rehabilitation Programs

Rehabilitation beds are those that are used for the care and treatment of persons requiring specialized therapeutic services and/or devices including physical and occupational therapy, speech language pathology services, audiology services, rehabilitation nursing services, recreational therapy, psychology/neuropsychology services, case management, dietary services and vocational rehabilitation counseling in order to return to the maximum level of functioning.

Although acute inpatient rehabilitation beds are separately licensed, units within general hospitals are categorized in the District of Columbia Hospital Association (DCHA) database as “Other” for two facilities and included in “Medical Surgical” for a third. See Table 1 for a report on the findings of a telephone survey of inpatient services in addition to the roster of licensed rehabilitation beds and beds reported by DCHA.

Based upon this survey of beds, data are collected and specified as rehabilitation for two of five inpatient programs. Licensure and classification of beds is inconsistent. Three of five known inpatient programs are CARF accredited. The inventory of designated acute inpatient rehabilitation beds is derived by totaling the number of beds that the Department of Health reported as licensed plus those beds operated by Hospital for Sick Children, which are accredited by CARF. That total is shown in the last column of Table 1.

The National Rehabilitation Hospital (NRH) is the District’s primary inpatient rehabilitation facility for adults. However, several acute care hospitals have designated rehabilitation nursing units within the hospital. The Hospital for Sick Children, a 130-bed licensed rehabilitation facility (with only 28 beds in use as of July 2001) provides some acute medical rehabilitative services for children and adolescents, with a primary focus on children with developmental disabilities and mental retardation. Children who require inpatient acute rehabilitation services are transferred to rehabilitation hospitals in Maryland and Virginia.

Table 1. Survey of Operating Acute Inpatient Rehabilitation Beds

Hospital Operating Acute Inpatient	Licensed Rehab	Licensed Pediatric	Operating	CARF	Percentage of
---	---------------------------	-------------------------------	------------------	-------------	--------------------------

Rehabilitation Unit					Operating Beds
National Rehabilitation Hospital (NRH)	141		128	Yes	91%
George Washington University Hospital	16		N/A		
Greater Southeast Hospital	20		N/A	Yes	
Washington Hospital Center	17*		N/A		
Hospital for Sick Children		130	128	Yes	98%
Total	194	130	256		

1. Telephone survey, July 2001 confirms all licensed units are operating.
2. Licensed beds reported by D.C. Department of Health, Licensing Regulation Administration
3. Beds licensed as Pediatric at Hospital for Sick Children are accredited by CARF for Acute Inpatient Rehabilitation and Pediatric Family-Centered Rehabilitation
4. Operating beds reported by District of Columbia Hospital Association, second Quarterly Report, August 2001. N/A means hospital either reported beds as “Other” or Medical-Surgical. Hospital for Sick Children not reported by DCHA; operating beds confirmed by phone.
5. Reported operating beds (150), according to the DCHA Quarterly Report for NRH exceed the licensed bed complement of NRH. This difference is not explained, but suggests that the number of beds reported as operating is higher than the number now in service.
6. CARF report of accredited medical rehabilitation programs, September 2001

* Burn Beds Only

In addition to these beds, other specialty inpatient beds are operating in the Washington, D.C., metropolitan area. Given the highly regional nature of rehabilitation services, these beds are available to all in the area who meet admission criteria. Other inpatient services include those listed in Table 2.

Table 2. Number and Location of Licensed Rehabilitation Beds in the Washington, D.C., Metropolitan Area

Inpatient Hospital	Rehabilitation Beds
Mount Vernon Hospital	55
Kessler Adventist Hospital	55

Source: Telephone survey of local hospitals – July 2001.

The growth of habilitation/rehabilitation services can be attributed to the emergence of strong regional systems with hospital alliances. This shift from highly centralized to decentralized services is closely associated with the overall movement toward ensuring that services are accessible and available to the consumers.

B. Habilitation/Rehabilitation Day Treatment Centers

NRH offers one of the three-day treatment programs in the Washington, D.C., metropolitan area (the others are at Mount Vernon Hospital in Virginia and Center for Neurological Research in Maryland). NRH's day treatment program has a capacity of 13 patients with an average length of stay of 8-10 weeks. Patients begin attending the program five days a week, 9 am to 4 pm, transition to three days, and then receive outpatient services. Average wait lists do not exceed two weeks, and one to two new patients are accepted weekly. Because of the limited number of day treatment programs, referrals are received from hospitals, nursing homes, various payors, and families in the District, Maryland, and Virginia.

C. Community-Based Habilitation/Rehabilitation Services

Each of the acute care hospitals, as well the Hospital for Sick Children, and private practitioners and group practices, free-standing centers offer community-based habilitative/rehabilitation services. Rehabilitation providers include, but are not limited to, physicians, physical therapists, speech pathologists, occupational therapists, psychologists, audiologists, recreation therapists, nutritionists, social workers, prosthetic technicians, and counselors.

The D.C. Department of Health (DOH) is moving towards the implementation of a centralized system for the collection, analysis and distribution of utilization data across public and private provider agencies that may render elements of medical rehabilitation services. Table 3 shows a partial list of D.C. outpatient rehabilitation centers by facility owner. Services include various components of rehabilitation therapies: physical therapy, occupational therapy, speech therapy, nutrition, and social services. It is important to note that all services may not be available at each center.

D. Community and Home-Based Services

The District of Columbia is moving towards establishing comprehensive, multidisciplinary, and a multi-focused service delivery system inclusive of affiliated primary care practices, and allied behavioral health practices. In addition, there are sole practitioners that involved within the system providing care. Selected providers are listed in Table 3.

Table 3. Outpatient Rehabilitation Centers in the District of Columbia

Owner	Outpatient Rehabilitation Centers
National Rehabilitation Hospital	<ul style="list-style-type: none"> Regional Rehab at Friendship Heights Regional Rehab at K Street NRH Regional Rehab at 19th Street National Rehabilitation Hospital, Flagship Facility NRH at the Washington Hospital Center
HealthSouth	HealthSouth Rehabilitation Center Of Washington, D.C., at 1720 Eye St. NW

Nova Care	<ul style="list-style-type: none"> • Nova Care Outpatient Rehab at 718 7th St NW • Nova Care Outpatient Rehab at 1234 19th St NW
Hospital for Sick Children Outpatient Center	<ul style="list-style-type: none"> • HSC Outpatient Center 1731 Bunker Hill Road, NE

Source: Health Regulation Administration, 2002

IV. PROJECTIONS

The projection of the need and demand for medical habilitation/rehabilitation services involves a number of significant challenges. To some degree, these challenges relate to present methods of collecting and reporting information. The principle obstacles are described below:

Data collection – All District hospitals do not report acute rehabilitation utilization data separately from overall hospital utilization data. As a result, the analyses of District-wide rehabilitation utilization data, are not currently possible within the present framework of the data submitted. In addition data are not collected on the free-standing community-based habilitation/rehabilitation services offered in the District.

Substitutability – It is possible, and may be frequently the case, that the need for comprehensive habilitation/rehabilitation services for an individual is met through a constellation of hospital-based, outpatient, and allied health professional services that are not organized as envisioned by CARF or District licensure authorities. Nonetheless, these arrangements are appropriate although at times fragmented and costly. This approach has often been substituted for an organized rehabilitation framework.

Situational needs – The prevalence of acute medical conditions, trauma, and disease within a population can be predicted; however, the degree to which such conditions that require habilitative or rehabilitative services is a problem for forecasters. Diagnosis is not a predictor of the need for rehabilitation.

Regional networks and continuums of care – Habilitation/Rehabilitation networks encompass many levels of treatment and care. Individuals can enter these networks at a number of points and levels of service. Since episodes of treatment may involve multiple settings for one individual, models are needed to measure the “case capacity” of service networks in order to determine the actual number of individuals who are served and the capacity of the current delivery system.

Accelerating shifts to community-based and home services – There is rapid movement of services away from centralized and hospital-based care to center-based services in neighborhoods. This includes an increasing share of home care,

which is the fastest growing segment of the healthcare industry according to the U.S. Bureau of Labor. As a result, habilitative/rehabilitative services have become highly fluid in nature and the static analysis of service capacity and need is complicated as a result.

In such an environment, it is appropriate to consider service capacity using the utilization of existing services, compared with capacity to identify whether or not community needs are being met with existing capacity. Utilization trends can also be analyzed and projected into the future to determine levels and volumes of service that are likely to be needed.

Based upon the database employed by this plan, the development of such a utilization-based forecasting methodology is also a problem. As previously noted, not all rehabilitation data is collected the same way, and even then it may not capture all of the need that a community has for rehabilitation services.

National Rehabilitation Hospital (NRH), which is at the center of the city's largest rehabilitation system, has a comprehensive rehabilitation-specific database. While other inpatient services are operated at Greater Southeast Community Hospital and George Washington University Hospital, they are not separated out for data reporting. The rehabilitation unit at Washington Hospital Center is for burn patients only and has no affiliation with NRH.

Using one hospital's data as a benchmark for all services raises a number of issues. In this case, the position of NRH indicates that it is a bellwether for acute rehabilitation that can be legitimately employed in projection of community-wide trends. Utilization trends for the hospital are shown in Table 4.

Table 4. National Rehabilitation Hospital Annual Utilization Summary

	1995	1996	1997	1998	1999	2000	2001
Admissions	1,694	1,716	1,704	1,741	1,683	1,717	1,713
Patient Days	40,985	40,210	37,932	36,445	35,449	39,031	36,306
Average Length of Stay	24.2	23.4	22.3	20.9	20.8		

Source: DCHA Database

Data show the following utilization trends:

- The average length-of-stay decreased. According to hospital sources, this trend has continued to the present time.
- Admissions increased, but only slightly over the period.

- Decentralization of services reduced the volume of inpatient services.

One approach to comparing system capacity to the need for services is to calculate facility capacity at optimal occupancy. Such a calculation is shown for NRH in Table 5, and demonstrates that capacity exceeds need by at least 20 beds even after the existing bed complement is adjusted for optimal occupancy.

**Table 5. Comparison of Capacity and Utilization
National Rehabilitation Hospital**

1. Beds	141
2. Days (annual)	365
3. Total bed days available (line 1 x line 2)	51,465
4. Capacity at 85 percent occupancy line 3 x .85)	43,745
5. Most recent data, total patient days (2001)	36,306
6. Excess capacity (patient days, line 4 minus line 5)	7,439
7. Excess beds (line 6/365)	20

Source:

Note: Total Patient Days reflect the total number of days for all services provided.

Population projections and a five-year forecast are not employed for habilitation/rehabilitation services since two factors were observed for this specialty service: the length of stay is declining, and the increasing number of rehabilitation patients are served in growing numbers of community-based programs.

Given the excess capacity that is estimated for NRH alone, it is unlikely that demand will exceed the current supply of adult beds.

However, there is anecdotal data that would support the need for a certain number of pediatric rehabilitation beds in the District.

In the event that preferences and utilization patterns shift either from short-term acute programs to specialized inpatient rehabilitation or back to hospitals from outpatient centers, additional services would be needed only as current inpatient units become more fully utilized. Those patterns, more than population, might impact demand; however, both prospects are considered remote.

The pattern reflect the advanced network of habilitation/rehabilitation services in and around the District of Columbia and point to the ability of a highly integrated regional system to respond to the market demand for shifts to alternative rehabilitation services.

Given the excess capacity that can be demonstrated, it is likely that sufficient capacity exists, especially considering all the factors described in this chapter that indicate reduced demand for inpatient beds in the future. The demand for acute rehabilitation services will undoubtedly increase due to the aging of the population, specifically those over 85 years of age, who are the fastest growing segment of the population in terms of age.

V. CRITERIA AND STANDARDS

A. Availability

The availability standards for medical habilitation/rehabilitation services are as follows:

- Comprehensive services in the metropolitan area should be sufficient to meet the needs of all metropolitan area residents.
- Comprehensive inpatient acute rehabilitation services should be operating at an 85 percent utilization level prior to consideration of expansion.
- Currently, there is excess capacity for inpatient rehabilitation services in the metropolitan area. Therefore, all future requests for the establishment of new services should not be honored until all providers currently in the system have met the required 85 percent utilization standard.
- Comprehensive and community-based physical and behavioral habilitation/rehabilitation services should be geographically located for ease of access by District residents.
- Outpatient rehabilitation services should be geographically dispersed throughout the District so that an individual regardless of the level of care needed, may receive treatment as close to home and family as possible.
- Both new and existing facilities and proposed new services should demonstrate that any unused capacity operating below the occupancy rate of 85 percent cannot meet the needs of the target population.
- Applicants for a certificate of need who propose to locate their services in underserved areas of the District should be given priority over other providers.

B. Accessibility

1. Inpatient

The accessibility standards for inpatient medical habilitation/rehabilitation services are as follows:

- Facilities providing habilitative/rehabilitation services shall be architecturally designed in conformance with requirements of Section 504 of the Rehabilitation Act of 1973, as amended. Use of the Uniform Federal Accessibility Standards (UFAS) (Appendix A to 41 CFR Section 101-19.6) is recommended. (See 28 CFR Section 42.522, 1987 amended.)
- Individuals should not be denied access to rehabilitation services because of inability to pay; therefore, facilities providing rehabilitation services shall meet the following requirements:
 - That all facilities be certified by Medicaid and Medicare,

- Have written policies consistent with State Health Planning and Development Agency (SHPDA) requirements, which govern the provision of care to the medically indigent at a reduced charge or without charge and are consistent with D.C. laws and regulations. These policies should, at a minimum, specify a reduced rate proportional with a patient's income and should apply to all services available at the facility. Policies should be accompanied by procedures for patients seeking to apply for care at a reduced charge.
 - Post these policies in a prominent place such as the patient registration area, and otherwise make these policies known to patients without insurance and to physicians who care for these patients.
 - Report annually to SHPDA the number of patients seen under the reduced care program for the medically indigent.
- Per metropolitan planning policies for regionalized special health services, comprehensive inpatient physical rehabilitation services should be available within a reasonable driving period for 90 percent of residents of the metropolitan area.
- Program design and administrative procedures should not discourage individuals in need from seeking and obtaining care.
- Interpreters or bilingual staff should be made available as needed.

2. Outpatient

Facilities providing outpatient rehabilitation services should be located such that they are easily accessible by the District's population. Travel time standards should be considerably less than for inpatient services so as not to create a barrier to seeking services.

C. Continuity

The standards of continuity for medical rehabilitation services are as follows:

- Facilities providing comprehensive acute rehabilitation services must identify and designate a case manager for each patient. The case manager will be responsible for overseeing the implementation of the patient's rehabilitation plan through the coordination of a team of representatives from each department serving the patient.
- Facilities should have an individualized rehabilitation plan for all patients recording all services needed for the rehabilitation process.
- Facilities should have written policies and procedures for service coordination, internal and external to the facility, and for discharge planning. In addition, they

should develop systems of care that span facilities and settings and include decentralization and networking.

- Facilities should have formal agreements with acute care hospitals for referral and transfer of patients between facilities. Agreements should include provisions for emergency services, special diagnostic services, and medical-surgical inpatient care.
- All acute care hospitals referring patients for comprehensive habilitative/rehabilitation services, including those with designated rehabilitation beds and those without such beds, should maintain coordination agreements with facilities providing comprehensive rehabilitation services or provide such services within their capabilities and interest.

The continuity standards presented above conform to CARF accreditation standards for program management and treatment. These standards have been condensed and are restated here because of their importance in promoting continuity of care. The standards support accreditation criteria which require the provision of “goal-oriented, comprehensive, interdisciplinary, and coordinated services, either within the organization or by linkages with other agencies” and “individually tailored, integrated, and coordinated” services.

D. Quality

The standards of quality for the provision of inpatient and outpatient habilitation/rehabilitation services are as follows:

- Any unit or facility that operates an inpatient rehabilitation program must have its beds licensed and designated in the appropriate category by the District’s Department of Health’s Health Regulation Administration. These units and facilities must also meet the Medicare criteria and standards for inclusion in the prospective payment system.
- Any unit or facility that operates an inpatient and outpatient rehabilitation program should obtain and maintain accreditation by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) and CARF.
- Any unit or facility that operates an inpatient rehabilitation program and is accredited by either JCAHO should include its outpatient rehabilitation program in its accreditation application.
- Inpatient and outpatient rehabilitation care services provided by a facility should be led by a physiatrist or a neurologist or a physician specialist with two years of formal training in rehabilitation medicine and must be delivered by professionals and paraprofessionals certified by the appropriate licensing authorities and professional bodies.

- All community-based and acute care habilitation/rehabilitation facilities should have written policies requiring periodic review and evaluation of programs. The evaluation process should include a review of objectives, administration and utilization of services, staffing, case conference procedures, admission and treatment criteria, and discharge and transfer criteria all included in JCAHO/CARF standards.
- Free-standing community-based and acute habilitation/rehabilitation facilities should have formal associations with educational institutions that provide training for habilitation/rehabilitation specialists to provide for the continuing education of staff members and a practicum experience for students specializing in habilitation/rehabilitation vocations.

The quality of habilitative/rehabilitative services is highly dependent upon the qualifications of staff. To ensure that there are sufficient numbers of well-trained providers and practitioners in agencies and settings that target this population, the rehabilitation facilities must actively participate in the education and training of students in the appropriate fields. In addition, they must provide for the continuing education of existing personnel.

All professionals providing habilitative/rehabilitation services within the District, regardless of the location of practice, are required to be duly licensed according to the Health Occupations Revision Act, D.C. Law 6-99.

E. Acceptability

The acceptability standards for medical rehabilitation standards are as follows:

- Community-based and free-standing providers that provide habilitative/rehabilitation services shall keep the client or legal guardian apprised of the client's progress, which includes notifying the client or legal guardian when there is a change in the plan of care such that a treatment service is eliminated or added.
- Each provider should have a community service program that serves to educate acute care providers and the community at large on the availability and benefits of comprehensive rehabilitation.
- Each provider should involve the patient and patient's family in the development and implementation of the individual habilitation/rehabilitation plan.

The first and third acceptability standards listed above are consistent with the CARF accreditation criteria designed to ensure that "persons served are involved in the planning, decision making, and implementation affecting the services which they will

receive.” The purpose of the second standard listed above is to foster community awareness and promote utilization of rehabilitation services during the period in which services will have the most positive outcome.

F. Cost

The cost standards for inpatient rehabilitation services are as follows:

- The costs of construction, equipment, and organization associated with the establishment, expansion, or renovation of a habilitation/rehabilitation facility should reflect an active intent to contain costs.
- Facilities should have a formal equipment selection process, which demonstrates physician and other relevant personnel’s approval of the proposed acquisition. The process should include a study of the impact of proposed equipment on the cost of operation and its potential benefits to patients.
- The staffing levels of habilitative/rehabilitation provider agencies, free-standing centers and practitioner offices should be sufficient to maintain current accreditation/professional credentialing requirements and meet the patient safety needs of the target population.
- Applications for Certificates of Need shall demonstrate the financial feasibility of the facility’s projections and provide cost estimates along with revenue projections. Medicare, Medicaid, private, and other payer sources shall break out revenue projections.

VI. GOALS AND OBJECTIVES

Goal 1:

Ensure reliable transportation services for individuals with disabilities from home to habilitation/rehabilitation programs.

Objectives:

- 1.1 Collaborate with public and private transportation services, including the Metro and other support transport services, to provide flexible schedules for pick-up and return of individuals from home to day programs.
- 1.2 Provide a sufficient number and type of vehicles to meet the transportation needs of individuals.
- 1.3 Enhance the DOH’s ability to collect, analyze and distribute standardized relevant transportation utilization data.

- 1.4 Develop and propose standards for companies and agencies that provide transportation services for individuals with disabilities.
- 1.5 Monitor the number and quality of transportation units provided by transportation companies and agencies to individuals with disabilities.

Goal 2:

Provide comprehensive appropriate habilitation/rehabilitation services for individuals, within the age group of greatest need who are eligible for Medicaid coverage in the Washington metropolitan region.

Objectives:

- 2.1 Form a coalition to develop the rationale for the inclusion of rehabilitation services for this targeted age group as a covered benefit under Medicaid.
- 2.2 Develop incentives to encourage Medicaid managed care plans to include acceptable rehabilitation services as a covered benefit for individuals, within the age group of greatest need.
- 2.3 Assess the effectiveness of current case management methods to individuals with disabilities within the age of group of greatest need.
- 2.4 Enhance the current case management methods to the target population.

Goal 3:

Provide access to translation and technological services for all District residents with behavioral health or developmental disabilities and who require rehabilitative services that involve District agencies.

Objectives:

- 3.1 Facilitate the utilization of the Language Line® by other District agencies to meet the language or technology needs of the individuals with MR/DD.
- 3.2 Annually update the agency resource guide to enhance public awareness of translation and assistive technology resources.
- 3.3 Develop and offer training modules to increase the competency of personnel regarding the utilization of technological services for individuals with MR/DD.

Goal 4:

Develop a system to collect standardized inpatient and outpatient utilization data on medical and behavioral habilitation/rehabilitation services.

Objectives:

4.1 Enhance the DOH's ability to collect, analyze and distribute relevant inpatient/outpatient and home care medical habilitation/rehabilitation utilization data over a one-year period.

4.2 Publish at least annually reports that highlight the relevant inpatient/outpatient and home care medical habilitation/rehabilitation utilization data.

Goal 5:

Develop a need methodology to determine the District's requirement for pediatric and geriatric beds.

5.1 Conduct a study analyzing the utilization of services in the District by individuals with disabilities between the ages of 0 and 18 years of age.

5.2 Conduct a study examining the utilization of services in the District by individuals with disabilities who are aging.

5.3 Publish the findings of the both studies and distribute to the appropriate public and private agencies within the District that serve the target population.

Goal 6:

Develop performance measures and outcomes for habilitation/rehabilitation services provided to District residents.

VII. APPENDICES

Appendix A. Number of Selected Reported Conditions Per 1,000, by Geographic Region and Place of Residence: United States 1996 (Data are based on household interviews of the civilian non-institutionalized population)

Geographic Region				
Type of chronic condition	Northeast	Midwest	South	West
Selected skin and musculoskeletal condition				
Arthritis	126.1	118.8	138.9	119.4
Gout, including gouty arthritis	9.3	9.8	9.2	9.4
Intervertebral disc disorders	23.3	23.3	28.0	25.4
Disorders of bone and cartilage	9.2	3.0	7.0	7.3
Bursitis	17.5	17.7	20.1	19.8
Impairments				
Visual impairment	30.8	28.9	37.1	25.3
Color blindness	10.0	10.4	13.7	6.6
Cataracts	21.4	29.1	26.7	28.5
Glaucoma	11.2	11.1	8.3	9.5
Hearing impairment	72.6	86.1	84.3	89.2
Tinnitus	19.4	29.9	34.6	31.7
Speech impairment	10.6	9.5	11.8	8.6
Absence of extremities	4.1	5.8	4.3	5.5
Paralysis of extremities, complete or partial	6.2	9.8	10.5	4.2
Deformity or orthopedic impairment	99.5	125.8	100.8	124.7
Back	59.1	72.1	52.2	78.3
Upper extremities	13.4	18.7	12.8	19.5
Lower extremities	37.3	57.1	49.2	46.1
Selected digestive conditions				
Ulcer	10.1	10.9	16.4	17.5
Hernia of abdominal cavity	19.2	17.5	17.2	13.7
Gastritis or duodenitis	16.7	13.8	12.3	14.9
Enteritis or colitis	9.0	5.0	6.9	4.6
Spastic colon	8.2	4.3	9.8	8.4
Diverticula of intestines	9.5	10.3	10.2	7.9
Selected conditions of systems				
Goiter or other disorders of the thyroid	11.0	12.5	21.8	21.9
Diabetes	24.9	25.2	35.3	26.5
Anemias	16.1	7.9	15.2	12.7

Epilepsy	4.4	7.9	3.7	4.6
Migraine headache	45.8	40.1	46.3	41.5
Neuralgia or neuritis	1.6	0.9	1.1	2.1
Kidney trouble	8.5	9.1	12.8	6.4
Bladder disorders	9.5	9.8	12.0	16.3
Diseases of prostate	10.0	7.4	14.0	9.3
Diseases of female genital organs	15.7	16.8	17.3	16.8
Selected circulatory conditions				
Rheumatic fever w/w/o heart disease	7.1	6.9	6.7	5.9
Heart disease	88.5	78.0	77.0	70.4
High blood pressure (hypertension)	109.3	108.2	113.5	93.7
Cerebrovascular disease	10.3	9.0	13.0	12.4
Varicose veins of lower extremities	33.8	29.6	20.1	33.5
Selected respiratory conditions				
Chronic bronchitis	51.0	59.0	53.0	50.7
Asthma	61.8	56.6	51.8	52.9
Chronic sinusitis	85.3	143.1	162.9	83.9
Emphysema	6.8	8.6	6.4	5.9

1. Number of chronic conditions per 1,000 persons

2. Source: http://www.cdc.gov/nchswww/data/10_200_1.pdf

Table A-3. Disabilities/Impairments and Assistive Technology Devices (1994)

- Approximately 7.4 million Americans use Assistive Technology Devices (ATDs) to accommodate mobility impairments (1994)
- Approximately 4.6 million Americans use ATDs to accommodate orthopedic impairments (1994)
- Approximately 4.5 million Americans use ATDs to accommodate hearing impairments (1994)
- Approximately 500,000 Americans use ATDs to accommodate vision impairments (1994)

Source: Advance Data 292

Table A-4. Disabilities and Impairments of U.S. Residents (1996)

- Over 8 million Americans have visual impairments (1996)
- Nearly 3 million Americans are color blind (1996)
- Over 700,000 Americans have Cataracts (1996)
- Nearly 3 million Americans have Glaucoma (1996)
- Approximately 22 million Americans are hearing impaired (1996)
- Almost 2.7 million Americans have speech impairments (1996)

Source: Vital and Health Statistics Series 10, No. 200

APPENDIX B
CARF Definitions (www.carf.org)

Rehabilitation	The process of providing those comprehensive services deemed appropriate to the needs of persons with disabilities in a coordinated manner in a program or service designed to achieve objectives of improved health, welfare, and realization of the person's maximum physical, social, psychological, and vocational potential for useful and productive activity. Rehabilitation services are necessary when a person with a disability is in need of assistance and it is beyond the person's personal capacities and resources to achieve his or her maximum potential for personal, social and economic adjustment and beyond the capabilities of the services available in the person's usual daily experience. Such assistance continues as long as the person makes significant and observable improvement.
Medical Rehabilitation	Covers the continuum of services with the understanding that persons who require these services can represent a wide range of conditions as they encounter this service continuum. Within the natural history of injury of disease, rehabilitation services are provided after the disease or injury process has been arrested or brought under control.

APPENDIX C
Continuum of Services for Medical Rehabilitation (www.carf.org)

Comprehensive Integrated Inpatient Rehabilitation Programs are coordinated and integrated medical and rehabilitation services that are provided 24 hours per day and endorse the active participation and choice of the persons served throughout the entire program.
Spinal Cord Systems of Care provide coordinated, case-managed, and integrated services for people with spinal cord dysfunction, whether due to trauma or disease. The system includes an inpatient component in an organization licensed as a hospital and an outpatient component. Each component endorses the active participation and choice of the persons served throughout the entire program. The Spinal Cord System of Care also provides or formally links with key components of care that address the lifelong needs of the persons served.
Interdisciplinary Pain Rehabilitation Programs provide outcomes-focused, coordinated, goal-oriented interdisciplinary team services to measure and improve the functioning of persons with pain and encourage their appropriate use of health care systems and services. The program can benefit persons who have limitations that interfere with their physical, psychological, social, or vocational functioning. The program shares information about the scope of the services and the outcomes achieved with its stakeholders.
Brain Injury Programs are specialized, interdisciplinary, coordinated, and outcomes focused. The program, through its scope statement, addresses the unique medical, physical, cognitive, psychosocial, behavioral, vocational, education, and recreational needs of persons with acquired brain injuries. The program encompasses care that enhances the lives of the persons served within their families or support systems, communities, and life roles. Core program areas include Comprehensive Integrated Inpatient, Outpatient, Home- and Community-Based, Residential, Long-Term Residential, and Vocational Services.
Outpatient Medical Rehabilitation Programs focus on meeting the needs of persons who are at risk of or are experiencing functional limitations. Such a program provides outcomes-focused rehabilitation services that emphasize optimizing function and promoting early intervention to increase function. An assessment process initiates the individualized treatment approach for each person served, which includes making medical support available based on these needs. Such a program includes direct service provision, education, and consultations to achieve the predicted outcomes of the persons served.
Home- and Community-Based Rehabilitation Programs provide integrated, case-managed, outcomes-focused rehabilitation services. Services are developed from comprehensive needs assessments. These programs focus on expectations and outcomes identified by the persons served and the program.
Health Enhancement Programs are proactive, comprehensive, and focused on outcomes. They are designed to prevent health risks and to optimize function, performance, productivity, and the quality of life of the persons served. These programs assist the persons served to identify and accept responsibility for the management of their own health and support their efforts to gain or maintain their health through a coordinated

continuum of care.
Pediatric Family-Centered Rehabilitation Programs are family centered, culturally sensitive, interdisciplinary, coordinated, and focused on outcomes. These programs serve children or adolescents who have significant limitations as a result of acquired or congenital impairments and should encompass care that enhances the life of each child within the family school, and community.
Occupational Rehabilitation Programs are individualized, focused on return to work, and designed to minimize risk to and optimize the work capability of the persons served. These services are integrative in nature, with the capability of addressing the work, health, and rehabilitation needs of those served. Core program areas include General Occupational Rehabilitation and Comprehensive Occupational Rehabilitation Programs.
Medical Rehabilitation Case Management proactively coordinates, facilitates, and advocates for seamless service delivery for persons with impairments, activity limitations, and participation restrictions based on initial and ongoing assessments; knowledge and awareness of care options and linkages; effective and efficient use of resources; individualized plans based on the needs of the persons served; predicted outcomes; and regulatory, legislative, and financial implications.

VIII. REFERENCES

Bureau of Labor Statistics. Safety & Health Statistics “Incidence Rate.” Retrieved from the World Wide Web at <http://stats.bls.gov/news.release/osh2.+06.htm>.

Bureau of Labor Statistics. 2000. Workplace injuries and illnesses in 1999. Retrieved December 12, 2000, from the World wide Web at <http://stats/bls.gov/special.requests/ocwc/oshwc/osh/os/osnr0011.text>.

Commission for the Accreditation of Rehabilitation Facilities (CARF). “Common Incentives for All Stakeholders” – www.carf.org

CARF. “Quality through Accreditation” – www.carf.org

CARF. “Today’s Rehabilitation” – www.carf.org

Challenges for the 21st Century. Chronic & Disabling Conditions “Arthritis” # 5, March 2000.

Centers for Disease Control. *Administration of Aging: Americans with Disabilities*: 1997 – Table...am Participation. http://www.cdc.gov/nchewww/data/10_200_1.pdf.

Centers for Disease Control. *Disabilities/Impairments and Assistive Technology Devices* (1994) Advance Data 292

Centers for Disease Control. Vital Statistics Series 10, No. 200.

NHR. Center for Health & Disability Research. “First Issue of Health Policy Brief Addresses Prescription Benefit” Fall 2000.

CHCD. Center for Health Care Strategies. “The Face.” Princeton, New Jersey.

Challenges for the 21st Century. Chronic & Disabling Conditions “Chronic Condition” # 1, November 1999.

District of Columbia Municipal Regulations 22, Chapter 40, 4099.2, Washington, D.C. 1998.

District of Columbia Department of Consumer and Regulatory Affairs. Number of Rehabilitation Beds, March 1998.

Datahr – Rehabilitation Institute. <http://www.datahr.org/terms.html>.

The Consortium. <http://consortiumrrtc.org>.

Informed Consumer's Guide to Funding Assistive Technology. July 1998.
www.abledata.com/site_2/funding.htm

Medicare H.R. 5661. Section 507.

Trupin, Laura, and Dorothy Rice. 1995. *Health Status, Medical Care Use, and Number of Disabling Conditions in the United States*. National Institute on Disability and Rehabilitation Research, June 1995.